

REMARKS

The non-final Office Action of December 16, 2003, has been carefully reviewed, and these comments are responsive thereto. Claims 1, 2, 4-14, 16-18, and 24-30 are now pending. By this Amendment, claims 3 and 15 are canceled, claims 19-23 are canceled as being directed to a non-elected invention, claims 1, 5, 9, 11, 12, and 16 are amended, and new claims 24-30 are added.

Claims 1 and 12 are each amended only to incorporate a respective dependent claim. Claims 5 and 9 are amended only to be rewritten in independent form. Claim 16 is amended only to correct a minor formal error but not to change its scope in any way.

Claims 1-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,549,675 to Chatterjee ("Chatterjee").

Independent Claim 1

Claim 1 is amended only to incorporate now-canceled dependent claim 3. As amended, claim 1 is directed to a method for rendering a digital ink stroke, comprising receiving a first pen tip instance; receiving a second pen tip instance; and determining a quadrangle based on the first and second pen tip instances, wherein the first and second pen tip instances each are associated with data representing at least one of a size, shape, and rotation of the respective pen tip instance.

The Office Action attempts to equate ink points of Chatterjee with the pen tip instances of claim 1. However, the ink points of Chatterjee are not associated with data representing at least one of a size, shape, and rotation of the respective ink point. Indeed, the ink points of

Chatterjee are merely a set of screen coordinates representing sampled locations of the pen. Chatterjee, col. 5, lns. 25-28; col. 9, lns. 55-61.

The Office Action refers to col. 12, lns. 50-53 of Chatterjee to allegedly show this claimed feature. However, this paragraph of Chatterjee merely discloses that the ink points may be replaced with shapes. Chatterjee does not teach or suggest anywhere that the ink points are each associated with data representing at least one of a size, shape, and rotation of the respective ink point.

The Office Action also cannot properly equate the shapes of Chatterjee with the claimed pen tip instances of claim 1. Significantly, a pen tip instance represents a location where a pen has been sensed (*see, e.g.*, specification, p. 14, para. 42), whereas the shapes of Chatterjee do not. Simply put, the shapes of Chatterjee are not pen tip instances.

Therefore, claim 1 as amended is allowable over Chatterjee.

Independent Claim 5

Claim 5 is amended only to rewrite it in independent form. Independent claim 5 is directed to a method for rendering a digital ink stroke, wherein a first pen tip instance is a circle, and two sides of a quadrangle are determined to each be a tangent of the circle.

As previously mentioned, an ink point in Chatterjee is merely a point defined by a set of coordinates. Clearly, an ink point in Chatterjee cannot be a circle as claimed.

Moreover, Chatterjee also fails to teach or suggest that a shape is specifically determined to be a quadrangle, having not just any sides, but having two sides that are each specifically determined so as to be a tangent of a circular pen tip instance.

Therefore, claim 5 is allowable over Chatterjee.

Independent Claim 9

Claim 9 is amended only to rewrite it in independent form. Independent claim 9 is directed to a method for rendering a digital ink stroke, wherein a first pen tip instance is a polygon, and two sides of a quadrangle are determined to each have one endpoint at a corner of the polygon.

As previously mentioned, an ink point in Chatterjee is a mere point defined by a set of coordinates. Therefore, an ink point in Chatterjee cannot be a polygon as claimed. Moreover, it is logically inconsistent to attempt to equate an ink point with both a circle (claim 5) AND a polygon, two very different classes of mathematical shapes.

Chatterjee also fails to teach or suggest that a shape is specifically determined to be a quadrangle, having not just any sides, but having two sides that are each specifically determined so as to have one endpoint at a corner of a polygonal pen tip instance.

Therefore, claim 9 is allowable over Chatterjee.

Independent Claim 11

Independent claim 11 as amended is directed to a method for rendering a digital ink stroke, comprising, *inter alia*, determining a region connecting the first and second pen tip instances, wherein the first and second pen tip instances each have an area defined by a contour.

Chatterjee fails to teach or suggest this claim feature. The ink points of Chatterjee do not each have a contour defining an area as claimed; they are each merely a point defined by a set of coordinates.

Therefore, claim 11 as amended is allowable over Chatterjee.

Independent Claim 12

Independent claim 12 is amended only to incorporate now-canceled claim 15. As amended, claim 12 is directed to a method for rendering a digital ink stroke, comprising receiving a first pen tip instance; receiving a second pen tip instance; determining a plurality of quadrangles based on first and second pen tip instances, and determining a union of the plurality of quadrangles. Thus, a plurality of quadrangles is determined based on the same two (i.e., the first and second) pen tip instances.

Chatterjee discloses replacing a series of ink points with shapes, but fails to teach or suggest that a plurality of shapes are based on the same two ink points. Therefore, Chatterjee does not teach or suggest determining a plurality of quadrangles based on first and second pen tip instances as claimed.

Also, Chatterjee simply fails to teach or suggest determining a union of a plurality of quadrangles (or of any shape). The Office Action refers to Chatterjee at col. 12, lns. 50-55, but this paragraph merely lists the types of shapes that are available and that a stream of points is replaced with a shape. Nor does any other portion of Chatterjee teach, or even suggest, this claim feature.

Therefore, claim 12 as amended is allowable over Chatterjee.

Independent Claim 16

Independent claim 16 is directed to an apparatus for dynamically rendering a digital ink stroke, the apparatus coupled to a graphics toolbox. The apparatus of claim 16 includes a second

portion coupled to a first portion and configured to generate a first pen tip instance associated with a first pen tip position, a second pen tip instance associated with a second pen tip position, and a quadrangle connecting the first and second pen tip instances, and to forward the first pen tip instance, the second pen tip instance, and the quadrangle to the graphics toolbox.

The claim thus requires that three items are forwarded to the graphics toolbox: the first pen tip instance, the second pen tip instance, and the quadrangle. However, Chatterjee fails to teach or suggest forwarding all three items to a graphics toolbox.

Chatterjee discloses compressing ink by replacing a series of original ink points with a series of shapes, and storing the series of shapes. When the compressed ink is later displaying, the stored series of shapes (instead of the ink points) are displayed. Assuming for the sake of argument that Chatterjee uses a graphics toolbox (which is not conceded), only the shapes of the compressed ink would be sent; the original ink points would not be sent in addition to the shapes. That is the whole point of Chatterjee: to replace ink points with shapes and discard the original ink points. Thus, where the compressed ink is displayed, Chatterjee fails to teach or suggest sending a quadrangle and first and second pen tip instances to a graphics toolbox as claimed.

Where the original ink points might be sent prior to compression, only the original ink points would be sent, and not the shapes. Thus, where the original ink points are displayed, Chatterjee also fails to teach or suggest sending first and second pen tip instances and a quadrangle to a graphics toolbox as claimed.

Therefore, at best, and assuming Chatterjee even uses a graphics toolbox (again, not conceded), then either the original ink points or the shapes would be sent. However, Chatterjee would never send both.

Therefore, claim 16 is allowable over Chatterjee.

Dependent Claims

Applicants respectfully submit that dependent claims 2, 4-10, 13, 14, 17, and 18 are also allowable over Chatterjee for at least those reasons set forth above with regard to their respective independent claims, and further in view of the additional features recited therein.

For example, claim 17 further recites that the graphics toolbox of claim 16 is configured to fill the first pen tip instance, the second pen tip instance, and the connecting quadrangle, and that a display coupled to the graphics toolbox is configured to display the filled first pen tip instance, the filled second pen tip instance, and the filled connecting quadrangle. However, the ink points of Chatterjee (which the Office Action compares with the claimed pen tip instances) cannot possibly be filled; they are mere points.

New Claims

New claims 24-30 are fully supported by the specification. Each of these claims is allowable over the art of record for at least the same reasons as their respective base claim, and further in view of the additional features recited therein.

Conclusion

All of the rejections having been addressed, Applicants respectfully submit that the application is in condition for allowance, and notification of the same is requested. Should the Examiner have any questions regarding this matter, the Examiner is encouraged to contact the undersigned at the number listed below.

Respectfully submitted,

BANNER & WITCOFF, LTD.

By: 

Jordan N. Bodner

Registration No. 42,338

Eleventh Floor
1001 G Street, N.W.
Washington, D.C. 20001-4597
(202) 824-3000